



London Borough of Harrow Council Local Plan Integrated Impact Assessment

Scoping Report Appendix B: Habitats Regulations Assessment

London Borough of Harrow Council

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1.0 Introduction

This appendix presents information about the European designated Habitats Sites which will be considered at the screening stage for the Habitats Regulations Assessment (HRA) of the new Harrow Local Plan, including the location of the Habitats Sites, the reasons for designation, conservation objectives and vulnerabilities. Information is provided for the following sites:

- Table B.1: Epping Forest Special Area of Conservation;
- Table B.2: Wormley-Hoddesdonpark Woods Special Area of Conservation;
- Table B.3 Chiltern Beechwoods Special Area of Conservation;
- Table B.4: Burnham Beeches Special Area of Conservation;
- Table B.5 Wimbledon Common Special Area of Conservation;
- Table B.6 Richmond Park Special Area of Conservation;
- Table B.7 South West London Waterbodies Special Protection Area;
- Table B.8 Windsor Forest & Great Park Special Area of Conservation;
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- Table B.10 Thursley, Ash, Pirbright & Chobham Special Area of Conservation;
- Table B.11 Thames Estuary & Marshes Ramsar;
- Table B.12 Thames Estuary and Marshes Special Area of Conservation;
- Table B.13 Essex Estuaries Special Area of Conservation; and
- Table B.14 Medway Estuary & Marshes Special Protection Area.



2.0 Information about Habitats Sites

Table B1: Epping Forest Special Area of Conservation	
Name	Epping Forest SAC (UK0012720)
Location with regards to plan area	The site occurs approximately 48 kilometres to the north east of the Plan Area.
Reason(s) for designation:	
<p>SAC: <u>Qualifying Features:</u> The site is designated under article 4(4) of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I: Primary:</p> <ul style="list-style-type: none"> • 9120 Atlantic acidophilous beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Illicic-Fagenion</i>) <p>Non-Primary:</p> <ul style="list-style-type: none"> • 4010 Northern Atlantic wet heaths with <i>Erica tetralix</i> • 4030 European dry heaths <p>The site is designated under article 4(4) of the Directive (92/43/EEC) as it hosts the following species listed in Annex II: Primary:</p> <ul style="list-style-type: none"> • 1083 Stag beetle <i>Lucanus cervus</i> 	
SSSI component site	<ul style="list-style-type: none"> • Epping Forest SSSI
Conservation objectives¹	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; <ul style="list-style-type: none"> • The extent and distribution of qualifying natural habitats and habitats of qualifying species; • The structure and function (including typical species) of qualifying natural habitats; • The structure and function of the habitats of qualifying species; • The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely; • The populations of qualifying species, and, • The distribution of qualifying species within the site.

¹ Natural England Epping Forest Conservation Objectives.
<http://publications.naturalengland.org.uk/publication/5908284745711616> (Accessed 14/07/2023)



Current condition²

9120 Atlantic acidophilous beech forests with *Ilex* and sometimes also *Taxus* in the shrublayer (*Quercion robori-petraeae* or *Ilicic-Fagenion*)

- The condition of this feature was assessed at 17 locations across the site. Four locations were considered to be in a favourable condition, whilst the remaining 13 were in an unfavourable condition.

4010 Northern Atlantic wet heaths with *Erica tetralix*

- This feature is present in four sections of the SAC and is in an unfavourable condition in three of these locations.

4030 European dry heaths

- The condition of this feature was recorded as either unfavourable with no change, unfavourable or was not recorded.

1083 Stag beetle *Lucanus cervus*

- For all areas of the site in which this qualifying feature is present, it is in a favorable condition.

Key current and predicted issues affecting the condition of the SAC features and/or the conservation objectives²:

1. Air pollution - Poor air quality is cited in the most recent condition assessment process (2010) as a primary factor for unfavorable conditions at this site. There are localised concerns over recreational pressure, but the condition assessment reports state that the site would be able to withstand this in a more robust manner were it not for the stress imposed by atmospheric pollutants.
2. Undergrazing is cited as one of two key pressures that currently affect the site. Maintain appropriate grazing levels;
3. Recreational pressure is having significant impact in certain areas of the SAC. Funding of management is governed largely by donation and Corporation of London and it is likely that the ability to adequately manage recreation on the SAC will come under increasing pressure as the population of northeast London, Epping Forest and east Hertfordshire increases.
4. Changes in species distribution - Maintain extent and distribution of beech trees by managing beech tree health and beech sapling recruitment;
5. Hydrological changes - maintain hydrological conditions within the site;
6. Water pollution - ensure water pollutants do not enter the site;
7. Invasive species - ensure invasive species do not spread i.e. heather beetle and grey squirrel; and
8. Disease - ensure disease does not spread within the site i.e. *Phytophthora*

² Epping Forest Designated Sites View [Designated Sites View \(naturalengland.org.uk\)](https://naturalengland.org.uk) (Accessed 20/07/2023)



Table B.2: Wormley- Hoddesdonpark Woods Special Area of Conservation	
Name	Wormley Hoddesdonpark Woods SAC (UK0013696)
Location with regards to plan area	The site occurs approximately 40 kilometres to the north east of the Plan Area.
Reason(s) for designation:	
<p>SAC: <u>Qualifying Features:</u> The site is designated under article 4(4) of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I: Primary:</p> <ul style="list-style-type: none"> • 9160 Sub-Atlantic and medio-European oak or oak-hornbeam forests of the <i>Carpinion betuli</i> 	
SSSI component sites	<ul style="list-style-type: none"> • Wormley-Hoddesdonpark Wood North • Wormley-Hoddesdonpark Wood South
Conservation objectives	<ul style="list-style-type: none"> • Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; • The extent and distribution of qualifying natural habitats; • The structure and function (including typical species) of qualifying natural habitats; and • The supporting processes on which qualifying natural habitats rely.³
<p>Current condition⁴ 9160 Sub-Atlantic and medio-European oak or oak-hornbeam forests of the <i>Carpinion betuli</i></p> <ul style="list-style-type: none"> • The condition of this feature was assessed across 23 areas within the SAC. 18 locations were identified as in a favorable condition, one was considered unfavorable and two were assessed as unfavorable and declining. 	
<p>Key current and predicted issues affecting the condition of the SAC features and/or the conservation objectives</p> <p>The majority of the woods in the complex are in sympathetic ownership with no direct threat. There is some pressure from informal recreation, and there has been limited damage in the past (for example from four-wheel drive vehicles). However, most recreation is concentrated on well-established paths. Most of the complex is covered by a High Forest Zone Plan (Hertfordshire County Council 1996) which sets out a framework for woodland management</p>	

³ Natural England 30 June 2014 – version 2.
<http://publications.naturalengland.org.uk/publication/4919819195383808>

⁴ Wormley-Hoddesdonpark Woods SAC Designated Sites View [Designated Sites View \(naturalengland.org.uk\)](http://naturalengland.org.uk) (Accessed 20/07/2023)



across the whole area. It aims to restore a varied age structure and natural stand types through sustainable forestry. There have been some instances of fly-tipping in the recent past, and this does increase the risk on non-native species, such as cherry laurel and privet from garden waste. Coupled with instances of car dumping, this does indicate that the site attracts some urbanisation pressures.

- Disease - ensure disease does not spread within the woodland. Acute Oak Decline is present in at least two parts of the site and affects both native oak species;
- Invasive species - ensure invasive species do not spread. Invasive species currently within the site include sycamore, turkey oak, rhododendron and snowberry;
- Air pollution - ensure no further increase in atmospheric nitrogen deposition;
- Deer - minimise deer browsing within the woodland;
- Vehicles - ensure no further fly tipping occurs within the site and illegal vehicles are not used within the site;
- Woodland management - ensure appropriate woodland management continues within the site; and
- Recreational pressures - maintain visitor management practices and review monitoring regularly and change management to adapt to changes in visitor activity.⁵

⁵ Adapted from Site Improvement Plan – Wormsley Hoddesdonpark Wood (Natural England, 2015) <http://publications.naturalengland.org.uk/publication/6314181103976448> (Accessed 14/07/2023)



Table B.3: Chiltern Beechwoods Special Areas of Conservation

Name	Chiltern Beechwoods SAC (UK0012724)
Location with regards to plan area	The site occurs approximately 40 km to the north east of the Plan Area.
Reason(s) for designation:	
<p>SAC: <u>Qualifying Features</u> The site is designated under article 4(4) of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I: Primary</p> <ul style="list-style-type: none"> • 9130 <i>Asperulo-Fagetum</i> beech forests <p>Non-Primary</p> <ul style="list-style-type: none"> • 6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>; important orchid sites) <p>The site is designated under article 4(4) of the Directive (92/43/EEC) as it hosts the following species listed in Annex II: Non-Primary</p> <ul style="list-style-type: none"> • 1083 Stag beetle <i>Lucanus cervusbraden</i> 	
SSSI component sites	<ul style="list-style-type: none"> • Ashridge Commons and Woods SSSI • Aston Rowant Woods SSSI • Bisham Woods SSSI • Bradenham Woods, Park Wood and The Coppice SSSI • Ellesborough and Kimble Warrens SSSI • Hollowhill and Pullingshill Woods SSSI • Naphill Common SSSI • Tring Woodlands SSSI • Windsor Hill SSSI
Conservation objectives⁶	<ul style="list-style-type: none"> • Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; • The extent and distribution of qualifying natural habitats and habitats of qualifying species; • The structure and function (including typical species) of qualifying natural habitats; • The structure and function of the habitats of qualifying species;

⁶ Chiltern Beechwoods SAC Conservation Objectives
<https://publications.naturalengland.org.uk/file/4961243408629760> (Accessed 14/07/2023)



	<ul style="list-style-type: none"> • The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely; • The populations of qualifying species, and, • The distribution of qualifying species within the site.
<p>Current condition⁷:</p> <p>9130 <i>Asperulo-Fagetum</i> beech forests</p> <ul style="list-style-type: none"> • This feature was assessed for its condition across 26 locations. • 23 locations were considered favourable and three unfavourable. <p>6210 Semi-natural dry grasslands and scrubland facies on calcareous substrates (<i>Festuco-Brometalia</i>; important orchid sites)</p> <ul style="list-style-type: none"> • This feature was assessed in four locations across the SAC. In three instances, the feature was assessed as being in an unfavourable condition and in one instance it was favourable. <p>1083 Stag beetle <i>Lucanus cervusbraden</i></p> <ul style="list-style-type: none"> • This feature was assessed for its condition in one location and was deemed favourable. 	
<p>Key current and predicted issues affecting the condition of the SAC features and/or the conservation objectives⁷</p> <p>The majority of Beechwoods in the Chilterns are very uniform in terms of age-class and species composition, as a result of historical promotion of beech as a timber tree. Significant changes to the structural and species diversity of these woods are required in order to promote a more natural composition. Beech woodland in the Chilterns is currently facing a decline due to a very low market value for timber and damage to young trees by grey squirrels. The availability of financial support through the Woodland Grant Scheme goes some way in helping to address this issue but it is not clear whether this offers sufficient incentive to woodland managers to continue to manage in ways which will promote an increase in structural and species diversity of the characteristic beechwood communities. In particular, there may be a lack of sufficient financial support to provide for the retention of a larger proportion of mature trees in order to increase the provision of deadwood habitat. This latter issue is the subject of a joint national review by Natural England and the Forestry Commission.</p> <ul style="list-style-type: none"> • Forestry and woodland management: woodland management has resulted in a uniform age structure in parts with few gaps in the canopy and restricted regeneration. Climate change may also impact on woodland regeneration and species composition. • Deer: browsing prevents or hinders natural regeneration of trees and ground flora. • Changes in species distributions: appropriate monitoring of stag beetle population is not being undertaken, making it difficult to manage the population or its habitat. • Invasive species: grey squirrels and edible dormouse damage growing trees by bark stripping. 	

⁷ Chilterns Beechwoods SAC Designated Sites View [Designated Sites View \(naturalengland.org.uk\)](https://naturalengland.org.uk)
 (Accessed 20/07/2023)



- Disease: box blight has been recorded on part of the SAC which could affect species composition of the site.
- Public access/disturbance: removal of dead wood by the public is an issue on some parts of the SAC which could impact saproxylic invertebrate fauna.
- Air pollution: impacts of atmospheric nitrogen deposition. Atmospheric nitrogen deposition exceeds the critical loads for ecosystem protection. Some parts of the site are recorded as unfavourable (recovering), but impacts associated with nitrogen deposition are unclear.



Table B.4: Burnham Beaches Special Areas of Conservation

Name	Burnham Beeches SAC (UK0030034)
Location with regards to plan area	The site occurs approximately 24 km to the west of the Plan Area.
Reason(s) for designation:	
<p>SAC <u>Qualifying Features:</u> The site is designated under article 4(4) of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I:</p> <ul style="list-style-type: none"> 9120 Atlantic <i>acidophilous</i> beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilicic-Fagenion</i>) 	
SSSI component site	<ul style="list-style-type: none"> Burnham Beeches SSSI
Conservation objectives⁸	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; <ul style="list-style-type: none"> The extent and distribution of qualifying natural habitats; The structure and function (including typical species) of qualifying natural habitats; The supporting processes on which qualifying natural habitats rely.⁹
<p>Current condition¹⁰ 9120 Atlantic <i>acidophilous</i> beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilicic-Fagenion</i>)</p> <ul style="list-style-type: none"> This qualifying feature was assessed for its condition at four separate locations. Three locations were in a favourable condition and one unfavourable. <p>It should be noted that discussions detailed in Liley et al (2012)¹¹ suggest that despite the majority of the SAC habitat being assessed by Natural England as being in favourable condition, there are concerns due to an increased rate of veteran tree loss caused by inappropriate veteran tree management and an increasing gap between young and ancient trees.</p> <p>Health monitoring of trees is carried out at Burnham Beeches, with staff undertaking detailed surveys of ancient pollards on a 10 year cycle, a less intensive check for management</p>	

⁸ Burnham Beeches Conservation Objectives
<https://publications.naturalengland.org.uk/file/5680758811525120> (Accessed 14/07/2023)

⁹ Natural England 30 June 2014 – version 2.
<http://publications.naturalengland.org.uk/publication/6014456282742784>

¹⁰ Burnham Beaches SAC Designated Sites View [Designated Sites View \(naturalengland.org.uk\)](https://publications.naturalengland.org.uk/publication/6014456282742784)
 (Accessed 20/07/2023)

¹¹ Liley, D., Hoskin, R., Fearnley, H., White, J. & Underhill-Day, J. (2012) Urban development and Burnham Beeches SAC. Unpublished report for Corporation of London.



Members of staff who carry out the health monitoring have noticed that the young trees are showing signs of ill health.

Key current and predicted issues affecting the condition of the SAC features and/or the conservation objectives¹⁰

- Air pollution: risk of atmospheric nitrogen deposition - lichen communities associated with trees are sensitive to nitrogen deposition.
- Public access/disturbance – veteran trees are vulnerable to damage as a result of soil compaction due to trampling or vehicle movement over the root zone.
- Habitat fragmentation – pressure from new housing development risks isolating the site from surrounding countryside.
- Deer – numerous in parts of the site and causing adverse impacts on tree regeneration and ground flora.
- Species decline – the number of veteran trees on site are declining and there is a significant age gap between these and the next generation.
- Invasive species – oak processionary moth occurs nearby. Rhododendron occurs across the site which also act as a host for the pathogens causing sudden oak death (which also affects beech).



Table B.5: Wimbleton Common Special Area of Conservation

Name	Wimbleton Common SAC (UK0030301)
Location with regards to plan area	Wimbleton Common SAC is located 20 km south of the Plan Area and 3 miles south of the river Thames.
Reason(s) for designation:	
<p>SAC: <u>Qualifying habitats:</u> The site is designated under article 4(4) of the Directive (92/43/EEC) as it hosts the following species listed in Annex II:¹² Primary:</p> <ul style="list-style-type: none"> • 1083 Stag beetle <i>Lucanus cervus</i> <p>Non-primary:</p> <ul style="list-style-type: none"> • 4010 Northern Atlantic wet heaths with <i>Erica tetralix</i> • 4030 European dry heaths 	
SSSI component site	<ul style="list-style-type: none"> • Wimbleton Common SSSI
Conservation objectives¹³	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring;</p> <ul style="list-style-type: none"> • The extent and distribution of qualifying natural habitats and habitats of qualifying species • The structure and function (including typical species) of qualifying natural habitats • The structure and function of the habitats of qualifying species • The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely • The populations of qualifying species, and, • The distribution of qualifying species within the site.
Current condition¹⁴	
<p>1083 Stag beetle <i>Lucanus cervus</i></p> <ul style="list-style-type: none"> • This qualifying feature was assessed as being in a favorable condition in all three locations which it was assessed in. 	

¹² JNCC Wimbleton Common SAC [Wimbleton Common - Special Areas of Conservation \(jncc.gov.uk\)](https://jncc.gov.uk) (Accessed 14/07/2023)

¹³ Wimbleton Common Conservation Objectives <https://publications.naturalengland.org.uk/file/6215672493506560> (Accessed 14/07/2023)

¹⁴ Wimbleton Common SAC Designated Sites View [Designated Sites View \(naturalengland.org.uk\)](https://publications.naturalengland.org.uk/Designated%20Sites%20View) (Accessed 20/07/2023)



4010 Northern Atlantic wet heaths with *Erica tetralix*

- This feature is in an unfavourable condition in the two sites they were assessed at.

4030 European dry heaths

- The site was assessed as being in an unfavourable condition in all three locations where they were assessed.

Key current and predicted issues affecting the condition of the SAC features and/or the conservation objectives¹⁴

- Habitat fragmentation is currently threatening the Stag Beetle population at Wimbledon Common.
- The Stag beetle remains vulnerable to extinction in the UK as a result of habitat loss and fragmentation of populations. Much work has been carried out to improve understanding of the distribution and habitat requirements of the species. Effective conservation is dependent upon protection not only of core sites such as Wimbledon Common, but public awareness of the value of gardens and retention of dead wood. Continuation of work by the Peoples Trust for Endangered Species is likely to play an important role.
- Invasive species, most notably the Oak processionary moth is now well-established at Richmond Park and are threatening the Wet heathland with cross-leaved heath, European dry heaths and the Stag beetle. This species represents a serious threat to human health. Control is potentially damaging to invertebrate populations and is expensive which may result in reduced nature conservation management.
- Public access and disturbance is putting pressure on the wet heathland with cross-leaved heath, European dry heaths and the Stag beetle. High visitor use of the site causes damage to sensitive habitats, and results in adverse impacts such as compaction around the base of mature trees and removal of fallen timber.
- Air pollution is putting pressure on the wet heathland with cross-leaved heath and the European dry heaths. Nitrogen deposition exceeds site relevant critical loads. Wimbledon Common is subject to high levels of atmospheric nitrogen oxide and ammonia deposition which is likely to be having deleterious effects on sensitive habitats, particularly the heath and mire vegetation.



Table B.6: Richmond Park Special Area of Conservation

Name	Richmond Park SAC (UK0030246)
Location with regards to plan area	Richmond Park is located 20 km south of the Plan Area and approximately 5 km south of the river Thames.
Reason(s) for designation:	
<p>SAC: <u>Qualifying features:</u> The site is designated under article 4(4) of the Directive (92/43/EEC) as it hosts the following species listed in Annex II:¹⁵</p> <ul style="list-style-type: none"> • 1083 Stag beetle <i>Lucanus cervus</i> 	
SSSI component site¹⁶	<ul style="list-style-type: none"> • Richmond Park SSSI
Conservation objectives	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring ¹⁷ : <ul style="list-style-type: none"> • The extent and distribution of the habitats of qualifying species • The structure and function of the habitats of qualifying species • The supporting processes on which the habitats of qualifying species rely • The populations of qualifying species, and, • The distribution of qualifying species within the site.
<p>Current condition: ¹⁸ 1083 Stag beetle <i>Lucanus cervus</i></p> <ul style="list-style-type: none"> • 13 areas of the SAC were assessed for their condition. Five areas were considered deemed favorable whilst eight were unfavorable. 	
Key current and predicted issues affecting the condition of the SAC features and/or the conservation objectives¹⁹	

¹⁵ JNCC Richmond Park SAC [Richmond Park - Special Areas of Conservation \(jncc.gov.uk\)](https://jncc.gov.uk/richmond-park-special-areas-of-conservation) (Accessed 14/07/2023)

¹⁶ Richmond Park Site Improvement Plan <https://publications.naturalengland.org.uk/file/4641498714865664> (Accessed 14/07/2023)

¹⁷ Natural England European Site Conservation Objectives for Richmond Park SAC <https://publications.naturalengland.org.uk/file/5521612917178368> (Accessed 14/07/2023)

¹⁸ Designated Sites View Richmond Park [Designated Sites View \(naturalengland.org.uk\)](https://naturalengland.org.uk/designated-sites-view) (Accessed 20/07/2023)

¹⁹ Site Improvement Plan: Richmond Park <https://publications.naturalengland.org.uk/file/4641498714865664> (Accessed 20/07/2023)



According to Natural England's Site Improvement Plan for Richmond Park SAC, no current issues affecting the qualifying feature have been identified.



Table B.7: South West London Waterbodies Special Protection Area

Name	South West London Waterbodies SPA (UK9012171)
Location with regards to plan area	South West London Waterbodies SPA is located approximately 23 km south south west of the Plan Area.
Reason(s) for designation:	
SPA: Article 4.2 qualification (79/409/EEC). Over winter the area regularly supports ²⁰ : <ul style="list-style-type: none"> • A056: Northern Shovekers; <i>Anas clypeata</i> • A051: Gadwall; <i>Anas strepera</i> 	
SSSI component sites	<ul style="list-style-type: none"> • Kempton Park Reservoirs SSSI • Knight & Bessborough Reservoirs SSSI • Thorpe Park No. 1 Gravel Pit SSSI • Wraysbury No. 1 Gravel Pit SSSI • Wraysbury Reservoir SSSI • Wraysbury & Hythe End Gravel Pits SSSI • Staines Moor SSSI
Conservation objectives²¹	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring: <ul style="list-style-type: none"> • The extent and distribution of the habitats of the qualifying features; • The structure and function of the habitats of the qualifying features; • The supporting processes on which the habitats of the qualifying features rely; • The population of each of the qualifying features; and • The distribution of the qualifying features within the site.
Current condition²²: A056: Northern Shovekers; <i>Anas clypeata</i> <ul style="list-style-type: none"> • The condition of this feature was assessed as unfavourable, recovering A051: Gadwall; <i>Anas strepera</i> <ul style="list-style-type: none"> • The condition of this feature was assessed as favourable 	
Key current and predicted issues affecting the condition of the SAC features and/or the conservation objectives²²:	

²⁰ JNCC Natura 2000 Standard Form [UK9012171.pdf \(jncc.gov.uk\)](#) (Accessed 14/07/2023)

²¹ South West London Waterbodies Conservation Objectives
<https://publications.naturalengland.org.uk/file/5411059804667904> (Accessed 14/07/2023)

²² South West London Waterbodies SPA Designated Sites View [Designated Sites View \(naturalengland.org.uk\)](#) (Accessed 20/07/2023)



Public access/disturbance: Most of the sites have some level of formal or informal public access, including water-based activities on some waterbodies (angling, sailing, waterskiing). People can potentially disturb wintering Gadwall and Shoveler, and management for recreational uses may reduce the area of suitable habitat.

Changes in species distributions Research has showed that Gadwell numbers have been in decline on this SPA (51% over 10 years up to 2009/10) which is not consistent with upwards national population trend. The reason for this decline is currently disputed, however mineral restoration schemes at the site and the presence of other waterbodies nearby which support the SPA population are considered factors which have influenced this decline.

There are concerns that Egyptian geese are showing significant increases and there is potential that geese are competing with Gadwall and Shoveler for habitat and food.

Invasive species: Large areas of wetland and terrestrial habitat are infested with *Crassula helmsii* and this is likely to be reducing invertebrate numbers - Gadwall and Shoveler feed on invertebrates. An eradication project is tackling *Crassula helmsii* but it is not fully effective so far.

Natural changes to the site: Natural changes to the site such as the inevitable maturation of gravel pits is altering roosting and feeding provision in terms of bankside vegetation, water chemistry and aquatic biodiversity.

Fisheries: fish stocking: The stocking of fish for recreation angling negatively impacts upon SPA bird population and fish de-stocking has been carried out in the past.

Inappropriate weed control: control or removal of waterweed for watersports potentially impacts upon the availability of food for Gadwall and Shoveler.



Table B.8: Windsor Forest & Great Park Special Area of Conservation

Name	Windsor Forest and Great Park SAC (UK0012586)
Location with regards to plan area	Windsor Forest and Great Park is located approximately 30 km to the south west of the Plan Area
Reason(s) for designation:	
<p>SAC²³: <u>Qualifying habitats:</u> The site is designated under article 4(4) of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I: Primary:</p> <ul style="list-style-type: none"> • 9190: Old <i>acidophilous</i> oak woods with <i>Quercus robur</i> on sandy plains <p>Non-primary:</p> <ul style="list-style-type: none"> • 9120 <i>Atlantic acidophilous</i> beech forests with <i>Ilex</i> and sometimes also <i>Taxus</i> in the shrublayer (<i>Quercion robori-petraeae</i> or <i>Ilici-Fagenion</i>) <p>The site is designated under article 4(4) of the Directive (92/43/EEC) as it hosts the following species listed in Annex II: 1079: Violet click beetle <i>Limoniscus violaceus</i></p>	
SSSI component site	<ul style="list-style-type: none"> • Windsor Forest and Great Park SSSI
Conservation objectives²⁴	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring:</p> <ul style="list-style-type: none"> • The extent and distribution of qualifying natural habitats and habitats of qualifying species; • The structure and function (including typical species) of qualifying natural habitats; • The structure and function of the habitats of qualifying species; • The supporting processes on which qualifying natural habitats and the habitats of qualifying species rely; • The populations of qualifying species; and • The distribution of qualifying species within the site.

²³ JNCC Windsor Forest and Great Park SAC [Windsor Forest and Great Park - Special Areas of Conservation \(jncc.gov.uk\)](https://www.jncc.gov.uk/windsor-forest-and-great-park-special-areas-of-conservation) (Accessed 14/07/2023)

²⁴ Natural England Windsor Forest and Great Park SAC Conservation Objectives <https://publications.naturalengland.org.uk/file/6569964010209280> (Accessed 14/07/2023)



Current condition²⁵

9190: Old *acidophilous* oak woods with *Quercus robur* on sandy plains

- This species has been assessed as being in a favourable condition across all areas of the designated site

9120 *Atlantic acidophilous* beech forests with *Ilex* and sometimes also *Taxus* in the shrublayer (*Quercion robori-petraeae* or *Ilici-Fagenion*)

- This species has been assessed as being in a favourable condition across all areas of the designated site

1079: Violet click beetle *Limoniscus violaceus*

- This species has been assessed as being in a favourable condition across all areas of the designated site

Key current and predicted issues affecting the condition of the SAC features and/or the conservation objectives²⁵

1. Forestry and woodland management is threatening the Beech forests on acid soils, the dry oak-dominated woodland and the Violet click beetle.
2. The loss of ancient/veteran beech trees due to gaps in age classes results in loss of the beech forest habitat and reduced habitat for the violet click beetle. There is a lack of understanding of current veteran tree and microhabitat resource, as well as the distribution of violet click beetles, and methods to ensure provision of its habitat requirements. This makes it difficult to establish appropriate management measures (such as the planting or 'promotion' of trees in the right locations).
3. The loss of ancient/veteran oak trees, and associated reduction in the abundance and diversity of veteran tree micro habitats, due to gaps in age classes has implications for Old acidophilous oak woods habitat and associated flora (including fungi) and fauna
4. Invasive species are threatening the Dry oak-dominated woodland and the Violet click beetle.
5. Oak processionary moth is widespread in south west London and is present within 20 miles of the site. If oak processionary moth colonises the site it could accelerate loss of the ancient oak population and/or cause serious management problems. Turkey oak is a significant threat to acorn viability and hence the natural regeneration potential of native oak. Rhododendron represents a threat to scrub /grassland /flower rich supporting habitats of saproxylic species.
6. Disease is threatening the Dry oak-dominated woodland.
7. Diseases of native oak are known from the local area. It is uncertain how significant this could be for the ancient oak population
8. Air pollution is putting pressure on the Dry oak-dominated woodland and the Dry oak-dominated woodland.
9. Nitrogen deposition exceeds site relevant critical loads. Likely sources include Heathrow airport which is close to Windsor Forest. Air quality is likely to be an issue for old trees, fungi and lichens

²⁵ Designated Sites View Windsor Forest [Designated Sites View \(naturalengland.org.uk\)](https://naturalengland.org.uk)
(Accessed 20/07/2023)



Table B.9: Thames Basin Heaths Special Protection Area

Name	Thames Basin Heaths SPA (UK0012793)
Location with regards to plan area	Thames Basin Heaths are located approximately 56 km to the south west of the Plan Area
Reason(s) for designation:	
SPA	
<u>Qualifying features:</u>	
<ul style="list-style-type: none"> • A224 <i>Caprimulgus europaeus</i>; European nightjar (Breeding) • A246 <i>Lullula arborea</i>; Woodlark (Breeding) • A302 <i>Sylvia undata</i>; Dartford warbler (Breeding) 	
SSSI component sites	<ul style="list-style-type: none"> • Chobham Common SSSI • Eelmoor Marsh SSSI • Horsell Common SSSI • Hazeley Heath SSSI • Ockham & Wisley Commons SSSI • Whitmoor Common SSSI • Colony Bog & Bagshot Heath SSSI • Bramshill SSSI • Ash to Brookwood Heaths SSSI • Broadmoor to Bagshot Woods & Heaths SSSI • Basingstoke Canal SSSI • Bourley & Long Valley SSSI • Castle Bottom to Yateley and Hawley Commons SSSI • Sandhurst to Owlsmoor Bogs & Heaths SSSI
Conservation objectives²⁶	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:</p> <ul style="list-style-type: none"> • The extent and distribution of the habitats of the qualifying features; • The structure and function of the habitats of the qualifying features; • The supporting processes on which the habitats of the qualifying features rely • The population of each of the qualifying features; and • The distribution of the qualifying features within the site.

²⁶ European Site Conservation Objectives for Thames Basin Heaths SPA
<https://publications.naturalengland.org.uk/file/5048458801315840> (Accessed 14/07/2023)



Current condition²⁷

A224 *Caprimulgus europaeus*; European nightjar (Breeding)

- The condition of this feature was assessed as favourable

A246 *Lullula arborea*; Woodlark (Breeding)

- The condition of this feature was assessed as favourable

A302 *Sylvia undata*; Dartford warbler (Breeding)

- The condition of this feature was assessed as favourable

Key current and predicted issues affecting the condition of the SAC features and/or the conservation objectives²⁹

1. Public access/disturbance: This SPA is subject to high levels of recreational use, with dog walkers making up a large proportion of visitors which is impacting the distribution and overall numbers of ground-nesting birds (and breeding success).
2. Undergrazing: The lack of grazing over a long period has resulted in poor habitat quality and the general undermanagement of the site is putting pressure on some of the features of this SAC. There is scope to improve efficiency in use of resources through improved coordination.
3. Forestry and woodland management: Large parts of Thames Basin Heaths are occupied by commercial forestry plantations where the maintenance of suitable conditions for Annex 1 birds is dependent upon rotational felling.
4. Inappropriate scrub control and Invasive species: The absence of scrub management plans at most sites is of concern as it is often viewed as a negative aspect with little consideration given for its value to Annex 1 birds. Nitrogen deposition exceeds the site-relevant critical load for ecosystem protection. The aerial pollution may be promoting changes in species composition of mires towards *Molinia* and sedge dominated systems rather than *Sphagnum* dominated. The spread of *Molinia* into wet and dry heath appears to be promoted by high nitrate levels.
5. Wildfire/arson: Uncontrolled fires are very damaging as they can have profound impacts on reptile populations, invertebrates and plant diversity and can result in significant habitat loss for Annex 1 birds.
6. Air pollution: impact of atmospheric nitrogen deposition
7. Military: None of the military training areas in the complex currently have integrated management plans which seek to integrate management of the estate for military training with nature conservation management.
8. Habitat fragmentation: Fragmentation of the complex means that recovery after devastating impacts such as fires and severe winters is restricted or prevented altogether, making it difficult for the recolonization of species.

²⁷ Thames Basin Heaths SPA Designated Sites View [Designated Sites View \(naturalengland.org.uk\)](https://naturalengland.org.uk)
(Accessed 20/07/2023)



Table B.10: Thursley, Ash, Pirbright & Chobham Special Area of Conservation	
Name	Thursley, Ash, Pirbright & Chobham SAC (UK0012793)
Location with regards to plan area	Thursley, Ash, Pirbright & Chobham SAC is located approximately 50 km to the south west of the Plan Area
Reason(s) for designation:	
<p>SAC: <u>Qualifying Features:</u> The site is designated under article 4(4) of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I:</p> <ul style="list-style-type: none"> • 4010: Northern Atlantic wet heaths with <i>Erica tetralix</i> • 4030: European dry heaths • 7150: Depressions on peat substrates of the <i>Rhynchosporion</i> 	
SSSI component sites	<ul style="list-style-type: none"> • Ash to Brookwood Heaths SSSI • Colony Bog & Bagshot Heath SSSI • Chobham Common SSSI • Thursley, Hankley & Frensham Commons SSSI • Basingstoke Canal SSSI
Conservation objectives²⁸	Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the Favourable Conservation Status of its Qualifying Features, by maintaining or restoring; <ul style="list-style-type: none"> • The extent and distribution of qualifying natural habitats; • The structure and function (including typical species) of qualifying natural habitats; and • The supporting processes on which qualifying natural habitats rely.
Current condition²⁹:	
4010: Northern Atlantic wet heaths with <i>Erica tetralix</i> <ul style="list-style-type: none"> • Out of the 52 sites assessed for their condition, exactly half were considered favourable, and the other half unfavourable. 4030: European dry heaths <ul style="list-style-type: none"> • Out of the 59 sites assessed for their condition, 35 were considered favourable, 23 were unfavourable and one was unfavourable and declining. 7150: Depressions on peat substrates of the <i>Rhynchosporion</i>	

²⁸ European Site Conservation Objectives for Thursley, Ash, Pirbright & Chobham SAC <https://publications.naturalengland.org.uk/file/4677991053656064> (Accessed 14/07/2023)

²⁹ Thursley, Ash and Pirbright Designated Sites View [Designated Sites View \(naturalengland.org.uk\)](https://publications.naturalengland.org.uk/file/4677991053656064) (Accessed 20/07/2023)



- Out of the 18 sites assessed for their condition, 13 were considered favourable, whilst the remaining five were deemed unfavourable.

Key current and predicted issues affecting the condition of the SAC features and/or the conservation objectives²⁹

1. Undergrazing: The lack of grazing over a long period has resulted in poor habitat quality and the general undermanagement of the site is putting pressure on some of the features of this SAC. There is scope to improve efficiency in use of resources through improved coordination
2. Forestry and woodland management: Large parts of Thames Basin Heaths are occupied by commercial forestry plantations where the maintenance of suitable conditions for Annex 1 birds is dependent upon rotational felling.
3. Hydrological changes
4. Inappropriate scrub control: Ineffective or lack of scrub control affects some areas of dry and wet heath. Rhododendron and Gaultheria control is on-going in parts but difficult to control where access for management is constrained. These invasive species pose a particular threat to dry rather than wet heaths
5. Invasive species: Nitrogen deposition exceeds the site-relevant critical load for ecosystem protection. The aerial pollution may be promoting changes in species composition of mires towards Molinia and sedge dominated systems rather than Sphagnum dominated. The spread of Molinia into wet and dry heath appears to be promoted by high nitrate levels
6. Wildfire/arson
7. Air pollution: impact of atmospheric nitrogen deposition
8. Military: None of the military training areas in the complex currently have integrated management plans which seek to integrate management of the estate for military training with nature conservation management.
9. Habitat fragmentation: Fragmentation of the complex means that recovery after devastating impacts such as fires and severe winters is restricted or prevented altogether, making it difficult for the recolonization of species.



Table B.11: Thames Estuary & Marshes Ramsar	
Name	Thames Estuary and Marshes Ramsar (UK11069)
Location with regards to plan area	Thames Estuary and Marshes Ramsar is located approximately 70 kilometres to the east of the Plan Area
Reason(s) for designation:	
<p>Ramsar</p> <p>The Information Sheet on Ramsar Wetlands states^{Error! Bookmark not defined.}</p> <p>Ramsar criterion 5 – assemblages of international importance:</p> <p><u>Species with peak counts in winter:</u></p> <ul style="list-style-type: none"> • 45118 waterfowl <p>Ramsar criterion 6 – species/populations occurring at levels of international importance:</p> <p>Qualifying species/populations (as identified at designation):</p> <p><u>Species with peak counts in spring/autumn:</u></p> <ul style="list-style-type: none"> • Ringed Plover, <i>Charadrius hiaticula</i>, Europe/Northwest Africa • Black-tailed godwit, <i>Limosa limosa islandica</i>, Iceland/W Europe • Species with peak counts in winter: • Grey plover, <i>Pluvialis squatarola</i>, E Atlantic/W Africa -wintering • Red knot, <i>Calidris canutus islandica</i>, W & Southern Africa • Dunlin, <i>Calidris alpina alpina</i>, W Siberia/W Europe • Common redshank, <i>Tringa totanus totanus</i> 	
SSSI component sites	<ul style="list-style-type: none"> • Ash to Brookwood Heaths SSSI • Colony Bog & Bagshot Heath SSSI • Chobham Common SSSI • Thursley, Hankley & Frensham Commons SSSI • Basingstoke Canal SSSI
Conservation objectives	N/A
<p>Current condition ³²:</p> <p>A137 <i>Charadrius hiaticula</i>; Ringed plover (Non-breeding)</p> <ul style="list-style-type: none"> • The condition of this feature was assessed as favourable <p>A141 <i>Pluvialis squatarola</i>; Grey plover (Non-breeding)</p> <ul style="list-style-type: none"> • Not recorded <p>A143 <i>Calidris canutus</i>; Red knot (Non-breeding)</p> <ul style="list-style-type: none"> • Not recorded <p>A149 <i>Calidris alpina alpina</i>; Dunlin (Non-breeding)</p> <ul style="list-style-type: none"> • Not recorded 	



A156 *Limosa limosa islandica*; Black-tailed godwit (Non-breeding)

- The condition of this feature was assessed as favourable

A162 *Tringa totanus*; Common redshank (Non-breeding)

- The condition of this feature was assessed as unfavourable, declining

Key current and predicted issues affecting the condition of the SAC features and/or the conservation objectives Error! Bookmark not defined.;

1. Erosion: The North Kent Coastal Habitat Management Plan (CHaMP) has been produced. The Environment Agency is producing a Flood Defence Strategy for the Thames (Thames 2100) and decisions on future flood risk management will need to take into account the effects on features within the designated sites. Studies of sediment transport and hydrodynamics within Thames
2. Eutrophication: Water quality and sources of nutrient inputs are subject to further investigation by the Environment Agency as part of the Agency's review of consents under the Habitats Regulations. Stage 3 of the Review of Consents (appropriate assessment) is scheduled for completion by March 2006, at which point any consented discharges having an adverse effect on site integrity will be identified.
3. General disturbance from human activities: The information sheet on Ramsar Wetlands³⁰ states that the site is used for the purpose of yachting, angling, wildfowling, jet-skiing, water-skiing and birdwatching. Bird watching occurs throughout the year and wildfowling is restricted to the period September to February. The remaining activities occur year-round but are more prevalent in the summer months. Disturbance from these activities is a current issue.

³⁰ Ramsar RIS Thames Estuary and Marshes [UK Thames Estuary and Marshes Final \(ramsar.org\)](https://www.ramsar.org)
(Accessed 17/07/2023)



Table B.12: Thames Estuary & Marshes Special Protection Area

Name	Thames Estuary and Marshes SPA (UK9012021A)
Location with regards to plan area	Thames Estuary and Marshes SPA is located approximately 72 km to the east of the Plan Area
Reason(s) for designation:	
<p>SPA <u>Qualifying Features:</u></p> <ul style="list-style-type: none"> • A082 <i>Circus cyaneus</i>; Hen harrier (Non-breeding) • A132 <i>Recurvirostra avosetta</i>; Pied avocet (Non-breeding) • A137 <i>Charadrius hiaticula</i>; Ringed plover (Non-breeding) • A141 <i>Pluvialis squatarola</i>; Grey plover (Non-breeding) • A143 <i>Calidris canutus</i>; Red knot (Non-breeding) • A149 <i>Calidris alpina alpina</i>; Dunlin (Non-breeding) • A156 <i>Limosa limosa islandica</i>; Black-tailed godwit (Non-breeding) • A162 <i>Tringa totanus</i>; Common redshank (Non-breeding) • Waterbird assemblage 	
SSSI component sites	<ul style="list-style-type: none"> • Mucking Flats & Marshes SSSI • South Thames Estuary & Marshes SSSI
Conservation objectives³¹	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring:</p> <ul style="list-style-type: none"> • The extent and distribution of the habitats of the qualifying features; • The structure and function of the habitats of the qualifying features; • The supporting processes on which the habitats of the qualifying features rely; • The population of each of the qualifying features; and • The distribution of the qualifying features within the site.
<p>Current condition³² :</p> <p>A082 <i>Circus cyaneus</i>; Hen harrier (Non-breeding)</p> <ul style="list-style-type: none"> • Not recorded <p>A132 <i>Recurvirostra avosetta</i>; Pied avocet (Non-breeding)</p> <ul style="list-style-type: none"> • The condition of this feature was assessed as favourable <p>A137 <i>Charadrius hiaticula</i>; Ringed plover (Non-breeding)</p> <ul style="list-style-type: none"> • The condition of this feature was assessed as favourable 	

³¹ Thames Estuary and Marshes SPA Conservation Objectives
<https://publications.naturalengland.org.uk/file/6393717116370944> (Accessed 14/07/2023)

³² Thames Estuary Condition [Site feature condition \(naturalengland.org.uk\)](https://publications.naturalengland.org.uk)



A141 *Pluvialis squatarola*; Grey plover (Non-breeding)

- Not recorded

A143 *Calidris canutus*; Red knot (Non-breeding)

- Not recorded

A149 *Calidris alpina alpina*; Dunlin (Non-breeding)

- Not recorded

A156 *Limosa limosa islandica*; Black-tailed godwit (Non-breeding)

- The condition of this feature was assessed as favourable

A162 *Tringa totanus*; Common redshank (Non-breeding)

- The condition of this feature was assessed as unfavourable, declining

Key current and predicted issues affecting the condition of the SAC features and/or the conservation objectives³²:

1. Coastal Squeeze: Despite the presence of coastal defences along much of the coastline, sea level rise is occurring. It is likely that the supporting habitats of the SPA birds will be lost/degraded through processes such as: coastal squeeze; sedimentation rates' inability to keep pace with sea level rise; and reduced exposure (the extent and duration) of mudflats and sandflats.
2. Public Access/Disturbance: Breeding and overwintering waterbirds are susceptible to human disturbance from a range of land- and water-based activities, including: boating and watersports; walking; bait-digging; fishing, and wildfowling. Some activities such as powerboating, may produce physical disturbance to habitats
3. Invasive Species: Freshwater non-native invasive species such as pennywort, crassula, parrots feather etc. can engulf ditches, leading to loss of habitat for diving ducks. Although there are some mechanisms in place to ensure ditch management, more baseline information is needed, particularly on those species for which ditch management is not the solution.
4. Changes in Species Distributions: There is a decline in population size for some of the bird species on some of the SPAs. A greater understanding of the relative importance of site-based and wider influences is required in order to identify the potential for further actions that might halt declines, restore populations or identify scenarios where it is thought unlikely that site-based measures will reverse population declines.
5. Fisheries: Commercial Marine and Estuarine: The extent and impacts of fisheries on private grounds. There are particular concerns regarding the dredging of shellfish within the SPAs which are a food source for the protected birds.
6. Vehicles: illicit: The illicit use of motor vehicles (often bikes) occurs across the area. This can cause disturbance to SPA birds. This activity was identified as a medium risk during the 2009 EMS risk review project and is still occurring. Whilst various mechanisms are in place to prevent the use of vehicles they are clearly not entirely effective.
7. Air Pollution: Nitrogen deposition exceed site-relevant critical loads



Table B.13: Essex Estuaries Special Area of Conservation

Name	Essex Estuaries SAC (UK0013690)
Location with regards to plan area	The Essex Estuaries SAC is located approximately 105 kilometers to the north east of the Plan Area
Reason(s) for designation:	
<p>SAC <u>Qualifying habitats:</u> The site is designated under article 4(4) of the Directive (92/43/EEC) as it hosts the following habitats listed in Annex I:</p> <ul style="list-style-type: none"> • Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>); • Estuaries; • Mediterranean and thermo-Atlantic halophilous scrubs (<i>Sarcocornetea fruticosi</i>). (Mediterranean saltmarsh scrub); • Mudflats and sandflats not covered by seawater at low tide. (Intertidal mudflats and sandflats); • Salicornia and other annuals colonising mud and sand. (Glasswort and other annuals colonising mud and sand); • Sandbanks which are slightly covered by sea water all the time. (Subtidal sandbanks); and • <i>Spartina</i> swards (<i>Spartinion maritimae</i>). (Cord-grass swards) 	
SSSI component sites	<ul style="list-style-type: none"> • Blackwater Estuary SSSI • Colne Estuary SSSI • Crouch and Roach Estuaries SSSI • Dengie SSSI • Foulness SSSI
Conservation objectives³³	<p>The objectives are to ensure that, subject to natural change, the integrity of the site is maintained or restored as appropriate, and that the site contributes to achieving the Favourable Conservation Status of its qualifying features, by maintaining or restoring:</p> <ul style="list-style-type: none"> • the extent and distribution of qualifying natural habitats and habitats of the qualifying species; • the structure and function (including typical species) of qualifying natural habitats; • the structure and function of the habitats of the qualifying species; • the supporting processes on which qualifying natural habitats and the habitats of qualifying species rely; • the populations of each of the qualifying species; and

³³ Conservation objectives Essex Estuaries SAC
<https://publications.naturalengland.org.uk/file/5457156304535552> (Accessed 17/07/2023)



	<ul style="list-style-type: none"> the distribution of qualifying species within the site.
<p>Current condition³⁴</p> <p>Natural England data for the site dated March 2021 identifies the following pressures associated with the site from the following most commonly occurring marine activities:</p> <p>Atlantic salt meadows (<i>Glauco-Puccinellietalia maritimae</i>);</p> <ul style="list-style-type: none"> The condition of this feature was assessed as unfavourable Estuaries; The condition of this feature was assessed as unfavourable Mediterranean and thermo-Atlantic halophilous scrubs (<i>Sarcocornetea fruticosi</i>). (Mediterranean saltmarsh scrub); The condition of this feature was assessed as unfavorable Mudflats and sandflats not covered by seawater at low tide. (Intertidal mudflats and sandflats); The condition of this feature was assessed as unfavorable <i>Salicornia</i> and other annuals colonising mud and sand. (Glasswort and other annuals colonising mud and sand); The condition of this feature was assessed as unfavorable Sandbanks which are slightly covered by sea water all the time. (Subtidal sandbanks); The condition of this feature was assessed as unfavorable <i>Spartina</i> swards (<i>Spartinion maritimae</i>). (Cord-grass swards) The condition of this feature was assessed as unfavourable 	
<p>Key current and predicted issues affecting the condition of the SAC features and/or the conservation objectives³⁴:</p> <ol style="list-style-type: none"> Coastal Squeeze Public access/disturbance Fisheries: commercial marine and estuarine Planning permission: general Changes in species distributions Invasive species Fisheries: recreational marine and estuarine Air pollution: risk of atmospheric nitrogen deposition 	

³⁴ Essex Estuaries SAC Designated Sites View [Designated Sites View \(naturalengland.org.uk\)](https://naturalengland.org.uk) (Accessed 20/07/2023)



Table B.14: Medway Estuary & Marshes Special Protection Area

Name	Medway Estuary and Marshes SPA (UK9012031)
Location with regards to plan area	Medway Estuary and Marshes is located approximately 80 kilometres to the south east of the Plan Area.
Reason(s) for designation:	
<p>SPA</p> <p><u>Qualifying Features:</u></p> <ul style="list-style-type: none"> • A046a <i>Branta bernicla bernicla</i>; Dark-bellied brent goose (Non-breeding) • A048 <i>Tadorna tadorna</i>; Common shelduck (Non-breeding) • A054 <i>Anas acuta</i>; Northern pintail (Non-breeding) • A132 <i>Recurvirostra avosetta</i>; Pied avocet (Breeding) • A132 <i>Recurvirostra avosetta</i>; Pied avocet (Non-breeding) • A137 <i>Charadrius hiaticula</i>; Ringed plover (Non-breeding) • A141 <i>Pluvialis squatarola</i>; Grey plover (Non-breeding) • A143 <i>Calidris canutus</i>; Red knot (Non-breeding) • A149 <i>Calidris alpina alpina</i>; Dunlin (Non-breeding) • A162 <i>Tringa totanus</i>; Common redshank (Non-breeding) • A195 <i>Sterna albifrons</i>; Little tern (Breeding) • Waterbird assemblage • Breeding bird assemblage 	
SSSI component site	Medway Estuary & Marshes SSSI
Conservation objectives³⁵	<p>Ensure that the integrity of the site is maintained or restored as appropriate, and ensure that the site contributes to achieving the aims of the Wild Birds Directive, by maintaining or restoring;</p> <ul style="list-style-type: none"> • The extent and distribution of the habitats of the qualifying features • The structure and function of the habitats of the qualifying features • The supporting processes on which the habitats of the qualifying features rely • The population of each of the qualifying features, and, • The distribution of the qualifying features within the site.
Current condition³⁶	
A046a <i>Branta bernicla bernicla</i> ; Dark-bellied brent goose (Non-breeding)	

³⁵ Medway Estuary and Marshes SPA Conservation Objectives
<https://publications.naturalengland.org.uk/file/5579733639364608> (Accessed 17/07/2023)

³⁶ Site improvement plan Greater Thames Complex
<https://publications.naturalengland.org.uk/file/5760073666134016> (Accessed 17/07/2023)



- The condition of this feature was assessed as unfavourable, declining
A048 *Tadorna tadorna*; Common shelduck (Non-breeding)
- The condition of this feature was assessed as unfavourable, declining
A054 *Anas acuta*; Northern pintail (Non-breeding)
- The condition of this feature was assessed as favourable
A132 *Recurvirostra avosetta*; Pied avocet (Breeding)
- Not recorded
A132 *Recurvirostra avosetta*; Pied avocet (Non-breeding)
- The condition of this feature was assessed as favourable
A137 *Charadrius hiaticula*; Ringed plover (Non-breeding)
- The condition of this feature was assessed as unfavourable, declining
A141 *Pluvialis squatarola*; Grey plover (Non-breeding)
- The condition of this feature was assessed as unfavourable, declining
A143 *Calidris canutus*; Red knot (Non-breeding)
- Not recorded
A149 *Calidris alpina alpina*; Dunlin (Non-breeding)
- The condition of this feature was assessed as unfavourable, declining
A162 *Tringa totanus*; Common redshank (Non-breeding)
- The condition of this feature was assessed as unfavourable, declining
A195 *Sterna albifrons*; Little tern (Breeding)
- Not recorded

Key current and predicted issues affecting the condition of the SAC features and/or the conservation objectives³¹:

1. Coastal squeeze: Despite the presence of coastal defences along much of the coastline, sea level rise is occurring. It is likely that the supporting habitats of the SPA birds will be lost/degraded through processes such as: coastal squeeze; sedimentation rates' inability to keep pace with sea level rise; and reduced exposure (the extent and duration) of mudflats and sandflats.
2. Human disturbance: Breeding and overwintering waterbirds are susceptible to human disturbance from a range of land- and water-based activities, including: boating and watersports; walking; bait-digging; fishing, and wildfowling. Some activities such as powerboating, may produce physical disturbance to habitats.
3. Changes in species distribution: There is a decline in population size for some of the bird species on some of the SPAs. A greater understanding of the relative importance of site-based and wider influences is required in order to identify the potential for further actions that might halt declines, restore populations or identify scenarios where it is thought unlikely that site-based measures will reverse population declines.
4. Fisheries: The extent and impacts of fisheries on private grounds. There are particular concerns regarding the dredging of shellfish within the SPAs which are a food source for the protected birds.
5. Invasive Species: Freshwater non-native invasive species such as pennywort, crassula, parrots feather etc. can engulf ditches, leading to loss of habitat for diving



ducks. Although there are some mechanisms in place to ensure ditch management, more baseline information is needed, particularly on those species for which ditch management is not the solution.

6. Vehicles: Illicit: The illicit use of motor vehicles (often bikes) occurs across the area. This can cause disturbance to SPA birds. This activity was identified as a medium risk during the 2009 EMS risk review project and is still occurring. Whilst various mechanisms are in place to prevent the use of vehicles they are clearly not entirely effective.
7. Air pollution: Nitrogen deposition exceed site-relevant critical loads



